

Knowledge Attitude Beliefs and Behaviour among Adolescents Regarding HIV/AIDS

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Abstract: Despite the high prevalence of HIV, it has been reported that many adolescents do not know the modes of transmission of this disease. The present study was undertaken to assess the extent of knowledge, beliefs and attitudes among adolescent students regarding HIV/AIDS. This cross sectional study conducted for a period of 13 months included 500 adolescent students studying in various schools and colleges in Hyderabad. They were asked to fill a prestructured, pretested questionnaire which included multiple choice questions. **RESULTS:** Regarding general aspect 90% of students heard of HIV/AIDS, Regarding knowledge about various modes of transmission 83% students answered correctly about transmission through unsafe sex with multiple partners, 61% of students have awareness about high risk group for HIV/AIDS and 43% of males and 47% of females have knowledge about non high risk population. Electronic media was the main source of awareness in 82% of students. 64% students have knowledge about preventive methods of HIV/AIDS. There is no difference in the attitude and beliefs towards HIV patients among male and female students. A considerable percentage of adolescents have correct knowledge about HIV/AIDS; yet they lacked in depth knowledge about the disease which emphasizes the need of adolescent education programmes in the country.

Keywords: Adolescents, HIV/AIDS, Awareness, knowledge.

INTRODUCTION

Adolescent age group (10-19 yrs) is an important segment of population and potential resource for prevention of HIV/AIDS transmission. HIV/AIDS is retarding economic growth by destroying human capital by mainly affecting the young adults in the age group of 15–24 years who are in their most productive ages of life [1]. In India a wide gap exists in the curriculum of HIV/AIDS and the actual education imparted to the students. Adolescents comprise about 22% of the population of India. Adolescents are generally inquisitive, sexually active and because many sexual contacts among them are unprotected, they are at risk of contracting sexually transmitted diseases (STDs) including HIV/AIDS. They must be guided properly in terms of sexual behavior and sexual relationship. It is said that prevention is better than cure. But as far as HIV/AIDS is concerned, there is possibility for prevention but not for cure.

A number of knowledge, attitude, behavior and practice (KABP) studies conducted in different

parts of India reveal a widespread ignorance and misconceptions about the disease among adolescents. So the present study was undertaken to assess the extent of knowledge, beliefs and attitudes among adolescent students regarding HIV/AIDS.

AIMS & OBJECTIVES OF THE STUDY

To assess the 'knowledge, attitude, beliefs and behaviour among adolescents regarding HIV / AIDS'

MATERIALS AND METHODS

Study Design: A cross sectional study

Approval: Received approval from college ethics committee

Participants: 500 adolescent students studying in various schools and colleges in Hyderabad

Duration of study: 13 months i.e. from September 2014 to October 2015.

Inclusion criteria

Adolescents aged 14 to 19 years, those who are studying in various schools and colleges and willing to participate in the study.

Exclusion criteria

- Adolescents those who are not studying and
- Adolescent students of telugu medium.

This cross-sectional study was conducted over a period of 13 months after clearance from the ethics committee of Osmania Medical College Hyderabad. A total of 500 students of Class X, inter, vocational, polytechnic, Degree College were selected randomly, from different government higher secondary schools and colleges of Hyderabad district. 362 boys (72%) and 138 girls (28%) were enrolled between age group of 14 to 19 years. The questions were explained to them, and they were asked to write answers to the questions on their own. Questionnaire included questions related to general aspect, causative agent, modes of transmission, high risk population, and source of awareness, modes of prevention, attitude and beliefs about people living with

HIV/AIDS (PLWHA). The response rate of students was 100%. The students were given a pre-designed proforma, which included multiple choice questions. They were asked to fill a pre-structured, pre-tested questionnaire within the school and college premises. Care was taken to minimize consultation amongst the school children. Written consent was obtained from the adolescents after explaining the purpose of the study to them.

DATA ANALYSIS

A master chart was prepared with all the data that was collected. Data was analyzed using SSPS version 19. Z test (2 TAILED) was done at 5% significance by means of simple comparison of proportions. Z value and P value were obtained by above test, if Z value is < 1.96 the P value will be > 0.05 that indicate there is no significant difference between two components. The results are then compared with other studies

OBSERVATIONS AND RESULTS

Table -1: Age distribution of study subjects

Age	N	Percentage
14	6	1.20%
15	34	6.80%
16	174	34.80%
17	149	29.80%
18	114	22.80%
19	23	4.60%

The study group consisted of 500 Adolescents from 14 years to 19 years, of whom, majority were between 16 to 18 years. The modal age was 16. Out of 500 students, 362(72.4%) were males, and 138(27.6%) were females. Male to female ratio is 2.62:1.

I.Questionnaire on knowledge regarding general aspect of HIV/AIDS

- A-HIV- stands for Human Immunodeficiency Virus:
- B-AIDS- stands for Acquired Immunodeficiency Syndrome
- C-Is HIV positive and AIDS same
- D-heard of HIV/AIDS

Table-2: Knowledge regarding general aspect of HIV/AIDS

Knowledge regarding general aspect of HIV/AIDS	Male N= 362		Female N=138		Total N=500		Z Value	P Value	
	Y	N	Y	N	Y	N			
A	Number	332	30	132	6	464	36	1.54	>0.05
	Percentage	92%	8%	96%	4%	93%	7%		
B	Number	288	74	114	24	402	98	0.76	>0.05
	Percentage	80%	20%	83%	17%	80%	20%		
C	Number	122	240	36	102	158	342	1.63	>0.05
	Percentage	34%	66%	26%	74%	32%	68%		
D	Number	332	30	132	6	464	36	1.54	>0.05
	Percentage	92%	8%	96%	4%	93%	7%		

(Y=yes, N=no)

Table-3: Perceptions about the causative agent/factor

Perceptions about the causative agent/factor		Male N= 362	Female N=138	Total N=500	Z Value	P Value
		Yes	Yes	Yes		
Virus	Number	136	54	190	0.61	>0.05
	Percentage	38%	39%	38%		
Bacteria	Number	11	1	12	0.58	>0.05
	Percentage	3%	1%	2%		
Fungus	Number	4	0	4	0.24	>0.05
	Percentage	1%	0%	1%		
protozoa	Number	5	8	13	0.93	>0.05
	Percentage	1%	6%	3%		
More Than One	Number	206	75	281	0.52	>0.05
	Percentage	57%	45%	56%		

II. Questionnaire on knowledge about modes of transmission of HIV

- A-Unsafe sex with infected persons
- B-Transfusion with infected blood
- C-Infected needles
- D-Infected pregnant mother to child
- E-Infected mother to child through breast feeding

- F-Sharing clothes with infected persons
- G-Casual contact with infected persons like hand shake, kissing, hugging
- H-Using same toilet with infected persons
- I-Bite from an infected person
- J-Sharing food utensils like drinking from same glass
- K-Insect bite

Table-4a: Knowledge about modes of transmission of HIV

		Male N= 362		Female N=138		Total N=500		Z Value	P Value
		correct	incorrect	correct	incorrect	correct	incorrect		
A	Number	310	52	106	32	416	84	2.359101	<0.05
	Percentage	86%	14%	77%	23%	83%	17%		
B	Number	289	73	108	30	397	103	0.388866	>0.05
	Percentage	80%	20%	78%	22%	79%	21%		
C	Number	266	96	103	35	369	131	0.263009	>0.05
	Percentage	73%	27%	75%	25%	74%	26%		
D	Number	175	187	103	35	278	222	5.289997	<0.05
	Percentage	48%	52%	75%	25%	56%	44%		
E	Number	205	157	73	65	278	222	0.750651	>0.05
	Percentage	57%	43%	53%	47%	56%	44%		

Table-4b: Knowledge about modes of transmission of HIV

F	Number	106	256	39	99	145	355	0.22	>0.05
	Percentage	29%	71%	28%	72%	29%	71%		
G	Number	194	168	48	90	242	258	3.76	<0.05
	Percentage	54%	46%	35%	65%	48%	52%		
H	Number	127	235	31	107	158	342	2.71	<0.05
	Percentage	35%	65%	22%	78%	32%	68%		
I	Number	178	184	44	94	222	278	3.48	<0.05
	Percentage	49%	51%	32%	68%	44%	56%		
J	Number	169	193	46	92	215	285	2.70	<0.05
	Percentage	47%	53%	33%	67%	43%	57%		
K	Number	139	223	46	92	185	315	1.05	>0.05
	Percentage	38%	62%	33%	67%	37%	63%		

III. Questionnaire on knowledge about high risk population for HIV/AIDS

- A. People with multiple sex partners.

- B. Needle sharing population.
- C. Drug abusers.
- D. Children born to infected mother.

Table-5: Knowledge about high risk population for HIV/AIDS

		Male N= 362		Female N=138		Total		Z Value	P Value
		Y	N	Y	N	Y	N		
A	Number	320	42	112	26	432	68	2.11	<0.05
	Percentage	88%	12%	81%	19%	86%	14%		
B	Number	226	136	99	39	325	175	1.95	>0.05
	Percentage	62%	38%	72%	28%	65%	35%		
C	Number	115	247	53	85	168	332	1.40	>0.05
	Percentage	32%	68%	38%	62%	34%	66%		
D	Number	216	146	81	57	297	203	0.20	>0.05
	Percentage	60%	40%	59%	41%	59%	41%		

(Y=yes, N=no)

IV. Questionnaire on knowledge about source of awareness

A-Electronic media; B-Print media;

C-Friends; D-Teachers; E-Father; F-Mother; G-Siblings; H-Pamphlets; I-NGO; J-Radio.

Table-6: Knowledge about source of awareness

Category		No. of Students getting awareness from the given source			Z Value	P Value
		Male N=362	Female N=138	Total N=500		
Electronic media	Number	302	107	409	1.53	>0.05
	percentage	83%	78%	82%		
Print material	Number	260	102	362	0.47	>0.05
	percentage	72%	74%	72%		
Friends	Number	235	74	309	2.32	<0.05
	percentage	65%	54%	62%		
Teachers	Number	206	86	292	1.10	>0.05
	percentage	57%	62%	58%		
Father	Number	145	53	198	0.34	>0.05
	percentage	40%	38%	40%		
Mother	Number	138	53	191	0.06	>0.05
	percentage	38%	38%	38%		
Siblings	Number	125	47	172	0.10	>0.05
	percentage	35%	34%	34%		
Pamphlets	Number	173	64	237	0.28	>0.05
	percentage	48%	46%	47%		
Ngo's	Number	139	51	190	0.30	>0.05
	percentage	38%	37%	38%		
Radio	Number	190	67	257	0.79	>0.05
	percentage	52%	49%	51%		

V. Questionnaire on knowledge about method of prevention of HIV/AIDS

- A. Using condom during sex.
- B. Safe blood transfusion
- C. Use disposable needles only

- D. Avoiding pregnancy if infected with AIDS
- E. Blood test for HIV/AIDS before marriage
- F. Health education for adolescents and all high risk groups on HIV/AIDS.

Table-7: Knowledge about method of prevention of HIV/AIDS (Gender wise)

category	Male N=362			Female N=138			Total N=500			Z Value	P Value	
	Y	N	NS	Y	N	NS	Y	N	NS			
A.	Number	284	40	38	89	14	35	373	54	73	3.21	<0.05
	Percentage	78%	11%	10%	64%	10%	25%	75%	11%	15%		
B.	Number	263	51	48	101	16	21	364	67	69	0.12	>0.05
	Percentage	73%	14%	13%	73%	12%	15%	73%	13%	14%		
C.	Number	235	66	61	87	25	26	322	91	87	0.39	>0.05
	Percentage	65%	18%	17%	63%	18%	19%	64%	18%	17%		
D	Number	176	107	79	72	25	41	248	132	120	0.71	>0.05
	Percentage	49%	30%	22%	52%	18%	30%	50%	26%	24%		
E	Number	233	64	65	88	20	30	321	84	95	0.12	>0.05
	percentage	64%	18%	18%	64%	14%	22%	64%	17%	19%		
F	Number	227	66	69	76	21	41	303	87	110	1.56	>0.05
	Percentage	63%	18%	19%	55%	15%	30%	61%	17%	22%		

(Y=yes, N=no, NS-not sure)

VI. Questionnaire on attitude of adolescent towards HIV infected persons

- A. I would visit my friend home if she/ he had HIV
- B. I would take care of my friend or relative if she / he had HIV
- C. Children with HIV should be allowed to go school with normal children
- D. Persons with HIV/AIDS can work as teacher
- E. If a shopkeeper / food seller is HIV positive, would you like to buy items from him / her

Table-8: Attitude of adolescent towards HIV infected persons

		Male N=362			Female N=138			Total N=500			Z Value	P Value
		A	D	NO	A	D	NO	A	D	NO		
A	Number	200	113	49	100	23	15	300	136	64	3.51	<0.05
	Percentage	55%	31%	14%	72%	17%	11%	60%	27%	13%		
B	Number	240	62	60	107	12	19	347	74	79	2.44	<0.05
	Percentage	66%	17%	17%	78%	9%	14%	69%	15%	16%		
C	Number	177	128	57	92	23	23	269	151	80	3.56	<0.05
	Percentage	49%	35%	16%	67%	17%	17%	54%	30%	16%		
D	Number	171	131	60	68	35	35	239	166	95	0.41	>0.05
	Percentage	47%	36%	17%	49%	25%	25%	48%	33%	19%		
E	Number	150	140	72	57	44	37	207	184	109	0.03	>0.05
	Percentage	41%	39%	20%	41%	32%	27%	41%	37%	22%		

(A-agree, D-disagree, NO-no opinion)

VII. Questionnaire on beliefs concerning HIV/AIDS

- A. AIDS is a threat to society
- B. I would continue to be a friend with an HIV friend or schoolmate
- C. There is no cure for AIDS
- D. Can one get HIV because of witchcraft / supernatural power
- E. A healthy person can transmit HIV/AIDS
- F. Do you know any HIV/AIDS positive person
- G. Do you know any person died of HIV/AIDS

Table-9: Beliefs concerning HIV/AIDS

		Male N=362		Female N=138		Total N=500		Z Value	P Value
		A	D	A	D	A	D		
A	Number	232	130	99	39	331	169	1.616682	>0.05
	Percentage	64%	36%	72%	28%	66%	34%		
B	Number	224	138	90	48	314	186	0.690504	>0.05
	Percentage	62%	38%	65%	35%	63%	37%		
C	Number	167	195	46	92	213	287	2.587218	<0.05
	Percentage	46%	54%	33%	67%	43%	57%		
D	Number	102	260	37	101	139	361	0.304589	>0.05
	Percentage	28%	72%	27%	73%	28%	72%		
E	Number	150	212	48	90	198	302	1.359929	>0.05
	Percentage	41%	59%	35%	65%	40%	60%		
F	Number	124	238	50	88	174	326	0.415016	>0.05
	Percentage	34%	66%	36%	64%	35%	65%		
G	Number	178	184	71	67	251	249	0.455404	>0.05
	Percentage	49%	51%	51%	49%	50%	50%		

(A-agree, D-disagree)

DISCUSSION

A cross sectional study conducted over a period of 13 months in various schools and colleges of Hyderabad. The study group consisted of 500 Adolescents of class X, Inter, Degree, Vocational and Polytechnic students from 14 years to 19 years, of whom, majority were between 16 to 18 years.

Knowledge regarding general aspect of HIV/AIDS:

Anjali Singh *et al.* study showed that 35 percent of the respondents knew the full form of HIV and AIDS correctly [2]. Only 35 per cent of them were aware that HIV and AIDS are not synonymous.

In a study done by Chandrasekhar Reddy Bolla *et al.* about 92.60% of participants had heard of HIV/AIDS and written correct abbreviation of HIV and AIDS [3]. In a study done by Dr R Darshan *et al.* 64.6% were aware that HIV and AIDS are two different entities which improved to 93.8% after lecture [4].

In the present study 92% of students heard of HIV/AIDS, 92% have correct knowledge about abbreviation of HIV, 80% about abbreviation of AIDS, 32% of students knows both HIV positive and AIDS are not same. The similar findings are found in Chandrasekhar Reddy Bolla *et al.* study. 66% males and 74% females did not know that both HIV positive and AIDS are not same; in this regard they need more awareness [3].

Perceptions about the causative agent/factor

S. Bhalla *et al.* study showed 90.5 per cent of the subjects knew that HIV/AIDS is caused by an infective agent [5]. In the present study 56% of the students said that more than one agent is the causative agent for HIV, 38% by virus, 3% by protozoa, 2% by bacteria, 1% by fungus. The study group has less awareness when compared to S. Bhalla *et al.* study [5]. There is no significant difference between male and female students with respect to perceptions about the causative agent/factor.

Knowledge about modes of transmission of HIV

In Prathibha Gupta *et al.* study 95.1% of the girls said that it was through unprotected sex, followed by sharing injections (88.2%), blood transfusion (84.3%), and sex with multiple partners (69.6%)[6]. There were no significant differences in the knowledge between boys and girls about modes of transmission of HIV/AIDS including mother-to-child transmission of HIV/AIDS except for transmission through a mosquito bite.

In Chandrasekhar Reddy Bolla *et al.* study 33.39% of participants knew that intravenous drug abuse will spread HIV virus [3]. In Dr. Darshan R Shah *et al.* study 87.6% were aware, that HIV/AIDS spreads through sexual intercourse, 78.9% were aware of

spread through infected blood transfusion ,64.6% students were aware of infected mother to baby transmission and 74.8% students knew about HIV/AIDS transmission through sharing needles with an infected person[4]. In P Lal *et al.* study, 48.2% student named sexual route, 44.4% named sharing of syringes and needles, 31.1% cited blood transfusion and 23.4% mother to baby transmission as routes of transmission[7].

In the present study, 11% students answered correct for all modes of transmission, 83% for transmission through unsafe sex with infected persons, 79% for infected blood transfusion, 56% had awareness about transmission from infected mother to baby, 56% for transmission through breast feeding and 74% know about infection through sharing needles. 89% of the students need awareness regarding all modes of transfusions.

In Jaiswal S *et al.* study, female's knowledge about HIV was low 43.2% as compared to male 48%, male's knowledge about transmission of HIV/AIDS from pregnant mother to child was low 89.7% as compared to female's knowledge 94.2% [8].

In the present study there is significant difference ($P < 0.05$) among male and female students about modes of transmission through unsafe sex with infected persons and from infected pregnant mother to child. The study findings are similar in Jaiswal S *et al.* study [8]. There is no significant difference ($P > 0.05$) among male and female students about modes of transmission through transfusion with infected blood, male and female through infected needles, male and female transmission through breast feeding.

In Chandrasekhar Reddy Bolla *et al.* study 31.34% participants knew that mosquito bite will not transmit HIV virus and 46.14% knew that sharing a meal with infected person will not transmit HIV virus [3]. In Senthil Kumar K *et al.* study 115 students knew that the infection could not occur from a toilet seat or through coughing and sneezing (115) or through mosquito bites (112) or sharing a glass of water with infected person (111) or by speaking with infected persons (130) or by sharing the towel of the infected person (104) or coming in contact with saliva, tears, sweat and urine of the infected persons (105) [9]. Dr. Darshan R Shah *et al.* study showed only 50.7% students were aware that kissing is not a mode of HIV/AIDS transmission [4].

In the present study 29% students have misconception about modes of transmission through sharing clothes with infected persons, using same toilet 32%, insect bite 37%, drinking from same glass 43%, bite from an infected person 44%, hand shake, kissing, and hugging 48%. Females have less misconceptions

($P < 0.05$), than males regarding casual contacts which was similar to Senthil Kumar K *et al.* study [9].

Knowledge about high risk population for HIV/AIDS:

Basir Gaash *et al.* study, 29.4% girls and 32.7% boys opined that prostitutes were high-risk group for HIV/AIDS followed by adolescents and homosexuals (23.5% girls and 22.1% boys; 23.5% girls and 20.3% boys, respectively). Only less than 1.0% girls and 4.4% boys felt that truck drivers were high-risk group for HIV/AIDS [10].

In the present study, 86% students opined that people with multiple sex partners were high-risk group for HIV/AIDS (88% male and 81% female), followed by 65% needle sharing population (62% male and 72% female), 59% children born to infected mother (60% male and 59% female), 34% drug abusers (32% male and 38% female) were high-risk group for HIV/AIDS. In the present study, awareness about high risk group for HIV/AIDS is more when compared to Basir Gaash *et al.* study [10]. There is no significant difference ($P > 0.05$) among male and female students, except for awareness about people with multiple sex partners ($P < 0.05$).

Knowledge about source of awareness

In Prathibha Gupta *et al.* study, for 85.0% students, the source of information about HIV/AIDS was television, followed by 39.5% getting it from the newspaper and friends/relatives [6]. There were no significant differences between boys and girls about the source of information regarding HIV/AIDS.

In the present study the source of awareness was electronic media (82%), followed by print material in 72%, friends 62%, teachers 58%, radio 51%, pamphlets 47%, father 40%, mother 38%, siblings 34%. There is no significant difference ($P > 0.05$) among male and female students about source of awareness. Similar findings are seen in Pankaj Kumar *et al.* study [11]. Father and mother, siblings are least source information; it indicates that social taboos and stigmata still continue in the society.

Knowledge about method of prevention of HIV/AIDS

In Chandrasekhar Reddy Bolla *et al.* study only 42.83% of participants knew how to prevent HIV/AIDS [3]. In Senthil Kumar K *et al.* study knowledge on mode of prevention and treatment (53.55%) was fairly good [9]. Many of them (126) rightly answered that HIV infection could be prevented by using condoms. In Dr. Darshhan R Shah *et al.* study 72.3% were aware of condoms in preventing HIV/AIDS [4].

Basir Gaash *et al.* study 61.5%, showed correct knowledge of various preventive measures (61.5%), 24.45% named abstinence, followed by sterilizing needles before injections (21.78%) as the main measures for an effective prevention, practicing safe sex (4.22%), avoiding drug addiction (3.56), and ensuring safe blood practices (2.47%) [10]. about 38.5 percent of the cohort surveyed could not think of any effective preventive measure. 25 percent believed that total premarital abstinence is the best method of prevention. Only a minority (4%) of our respondents had heard about condom use for practicing safe sex.

In P Lal *et al.* study, only 72% of students were aware about HIV/AIDS as being preventable. Moreover, awareness about the different methods of prevention was rather low. Only 14.9% had knowledge about condoms as a means of protection [7].

In the present study 64% students have knowledge about preventive methods of HIV/AIDS, 17% did not have knowledge and 18% were not sure. There is significant difference ($P < 0.05$) among male and female students about method of prevention by using condom during sex, in this regard male students are having (78%) more awareness when compared to females (64%). There is no significant difference ($P > 0.05$) among male and female students about method of prevention by other methods.

Attitude of adolescent towards HIV infected persons

Prathibha Gupta *et al.* study showed that 55% of the respondents showed their willingness to play, 67% were ready to shake hand and 74 % of them had no hesitation to eat food with HIV/AIDS infected people [6]. This acceptability was slightly more for boys than girls. In Chatterjee C *et al.* study 45.8% of girls, 38.8% of boy's students and 20.3% of teachers had positive attitudes towards nursing an AIDS case [12].

In the present study female students (72%) have more positive attitude towards HIV infected persons when compared to (55%) male students regarding visit to friend home if she/ he had HIV, (78%) of female students and 66% of male students were willing to take care of friend or relative if she / he had HIV and (67%) of female and 49% males had positive attitude regarding allowing HIV children to go school with normal children. Similar findings are seen in Prathibha Gupta *et al.* study [6]. Regarding attitude towards HIV infected persons there is no significant difference ($P > 0.05$) among male (47%) and female (49%) students about persons with HIV/AIDS working as teacher and buy items male (41%) and female (41%) from a shopkeeper / food seller who is HIV positive.

Beliefs concerning HIV/AIDS

Senthil kumar *et al.* study found that 119 out of 203 students were aware of the fact that there was no cure for AIDS [9]. It was found that around 64% knew that HIV/AIDS is preventable.

In the present study 66% agreed that AIDS is a threat to society, 63% would continue to be a friend with an HIV friend or schoolmate, 43% agreed that there is no cure for AIDS, 28% had a false notion that HIV is caused by witchcraft / supernatural power. 40% per cent of the adolescents knew that a healthy person can transmit the disease. 35% students knew that there were HIV/AIDS positive persons, 50% students knew that some people died of HIV/AIDS. Similar responses are found in Senthilkumar *et al.* study [9]. There is no significant difference ($P > 0.05$) among male and female students about beliefs concerning HIV/AIDS except for belief that there is no cure for AIDS where $P < 0.05$.

CONCLUSIONS

- The study findings reveal that though a considerable percentage of adolescents had correct knowledge about HIV/AIDS; yet they lacked in-depth knowledge about the disease. This result emphasizes the need of school adolescent education programmes in the country.
- Both males and females have misconception on modes of transmission like drinking from same glass, casual contact with infected persons like hand shake, kissing, hugging.
- The source of awareness for both male and female was electronic media.
- Females have more positive attitude towards HIV/AIDS patients.
- Lack of reliable means of obtaining correct information on HIV/AIDS led to misconceptions.

LIMITATIONS

- Students who could understand English were only included for study.
- Early adolescents of age group 10-13 years were not included in the study.
- Study results were dependent on participant responses.

RECOMMENDATIONS

- The school authorities and the other concerned should come forward to design awareness campaigns regarding HIV/AIDS and to change the attitudes of the adolescents to reach the goal of "zero discrimination".
- Inclusion of a specific chapter on HIV/AIDS in the school curricula which could help in preventing and curbing the spread of the epidemic to a great extent.
- While the teacher plays a pivotal role in imparting education, the use of multi-pronged methods such as films, group discussions, dramas, puppet shows and role-plays must be incorporated.

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